

# **MORTGAGE METRICS AGGREGATE DATA COLLECTION SPECIFICATIONS**

Office of the Comptroller of the Currency

## Contents

General Data Collection Requirements .....	3
Data Dictionary and Definitions .....	5
Field Definition and Reference .....	6
Technical Specifications .....	10
Schema Definition Details .....	10
Table: 0. File Reference Table .....	11
Table: 1. Mortgage Modification Action by State .....	11
Table: 2. Combination Modification Action by State .....	12
Table: 3. Changes in Principal and Interest by State .....	12
Table: 4. Re-defaults for Loan Modifications by State .....	13
Table: 5. Overall Mortgage Portfolio .....	13
Table: 6. Overall Portfolio Performance .....	13
Table: 7. Completed Foreclosures and Other Home Forfeiture Actions .....	14
File Submission Requirements .....	15
Submission Process .....	15
File Naming Convention .....	16
Appendix A: Illustration of Collection Requirements .....	17
Table 1. Illustrative reference of requirements (1A) through (1E) and (G). .....	17
Table 2. Illustrative reference of requirements (1F). .....	17
Table 3. Illustrative reference of requirements (2A) through (2F). .....	17
Table 4. Illustrative reference of requirements (3A) through (3F) .....	17
Table 5. Illustrative reference of requirements (4A) through (4C). .....	17
Table 6. Illustrative reference of requirements (5A) .....	18
Table 7. Illustrative reference of requirements (6A) through (6D). .....	18
Appendix B – Traceability Matrix and Cross-walk From Prior Loan Level Data Collection to the Aggregate Data Collection .....	19
Table 8. List of Loan Level Fields used to derive Aggregate Measurements .....	19
Traceability Matrix and Logic .....	20
Appendix C – XML Schema .....	42
Appendix D – Sample XML Data File .....	42
Appendix E – State Abbreviation Reference .....	43



## General Data Collection Requirements

Pursuant to Section 104 of the Helping Families Save Their Homes Act of 2009 (12 USC § 1715z-25), the OCC will collect quarterly loss mitigation and portfolio level metrics. This document depicts the Technical Specifications, including the reporting requirements, data dictionary and definitions, and traceability matrix between loan level data collection to aggregate collection as well as the submission process and format for transmitting the data to the OCC.

The Mortgage Metric aggregated collection will include metrics on first lien residential mortgages serviced by a national bank or Federal savings association, which will fulfill reporting requirements set forth in Section 104 of the Helping Families Save Their Homes Act of 2009 (12 USC § 1715z-25). The Loss Mitigation loan level data that is collected by the OCC authorized third party aggregator and is used to fulfill these requirements set forth will expire on 11/30/2016.

Section 104 of the Helping Families Save Their Homes Act of 2009 (12 USC § 1715z-25) includes the following requirements:

**(1) The total number of mortgage modifications in each state that result in each of the following:**

- (A) Additions of delinquent payments and fees to loan balances.
- (B) Interest rate reductions and freezes.
- (C) Term extensions.
- (D) Reductions of principal.
- (E) Deferrals of principal.
- (F) Combinations of modifications described in (A), (B), (C), (D), or (E).
- (G) Not Reported or Unknown<sup>1</sup>

**(2) The total number of mortgage modifications in each state for which the total monthly principal and interest payment resulted in the following:**

- (A) An increase.
- (B) Remained the same.
- (C) Decreased less than 10 percent.
- (D) Decreased between 10 percent and 20 percent.
- (E) Decreased 20 percent or more.
- (F) Not Reported or Unknown<sup>1</sup>

**(3) The total number of loans in each State that have been modified and then entered into default, where the loan modification resulted in--**

- (A) higher monthly payments by the homeowner;
- (B) equivalent monthly payments by the homeowner;
- (C) lower monthly payments by the homeowner of up to 10 percent;
- (D) lower monthly payments by the homeowner of between 10 percent to 20 percent; or
- (E) lower monthly payments by the homeowner of more than 20 percent.
- (F) Not Reported or Unknown<sup>1</sup>

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<sup>1</sup> Not Reported or Unknown will be used to determine entire loan modification population.

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*Additional Performance and Loss Mitigation measurements will also be collected and reported within the quarterly Mortgage Metrics Report:*

**(4) Overall Mortgage Portfolio**

- (A) Total outstanding unpaid principal balance of serviced mortgage loans*
- (B) Total Number of serviced mortgage loans.*
- (C) Credit class of the serviced mortgage loan (Prime, Alt-A, Subprime, Other).*

**(5) Overall Portfolio Performance**

- (A) Total Number of serviced mortgage loans by delinquency status to include loans that are Current, Delinquent, Bankrupt and Foreclosure in Process.*

**(6) Completed Foreclosures and Other Forfeiture Actions in the reporting period for serviced mortgage loans**

- (A) Total Number of serviced mortgage loans that Completed Foreclosure*
- (B) Total Number of New Short Sales.*
- (C) Total Number of New Deed in Lieu of Foreclosure Actions.*
- (D) Total Number of Newly Initiated Foreclosures.*

## Data Dictionary and Definitions

The section describes the definitions for each of the fields required in reporting the Mortgage Metrics aggregated data collection. These definitions are similar to guidance previously provided by the Office of the Comptroller of the Currency as part of the Mortgage Metrics program. Information about tracing these definitions with the OCC Loss Mitigation Loan Level data collection provided in the Appendix B.

The reporting population for the Mortgage Metrics data collection will include serviced First Lien Mortgages defined as all Residential Real Estate closed-end loans serviced by the reporting institution as of the end of the reporting period where the loan represents the senior lien on the collateral property. This definition includes loans that are in portfolio, serviced for others, government-sponsored enterprises (GSE), and private investors. Mortgage loan inventory should include 1) all active loans on the last day of the reporting period, 2) all inventory that has been transferred to another servicer, but only if transferred in the reporting period, and 3) all inventory that was liquidated, but only if liquidated during the reporting period. Open-ended Home Equity Lines of Credit, junior lien mortgages, and Home Equity Conversion Mortgages (reverse mortgages) are excluded.

For further details regarding the First Mortgage population, please refer to the Federal Reserve Y-9C reporting instructions for first lien residential mortgage loans that would be reported on FR Y-9C, Schedule HC-C, item 1.c.(2)(a) (first lien closed-end loans secured by 1-4 family residential real estate), Schedule HC-S, item 1 column A, Schedule HC-S item M.2.a, Schedule HC-S, item M.2.b, Schedule HC-S, item M.2.c, and Schedule HC-S, item M.2.d.

**Active Loans** are First Mortgage loans where the loan is serviced by the reporting institution and has an unpaid principal balance greater than \$0. Do not include loans that have been paid-in-full, liquidated, charged-off, or transferred servicing to another servicer as of the end of the reporting period.

**Loan modification** is a formal agreement between the mortgage servicer and the borrower to adjust the contractual terms of the mortgage with respect to interest rates, maturity, principal, or other terms of the loan due to the financial distress of the borrower. These loans will include modified loans that were liquidated, (including paid-in-full, completed foreclosure, short sale, deed-in-lieu or charged-off-in-lieu), but only if liquidated during the reporting period.

**Reporting Period** - for the purposes of this report, the reporting period will be the most recently completed financial quarter ending March 31, June 30, September 30 or December 31. Some data fields will record results as-of the final date of the quarter while other data fields will aggregate activity that took place during the quarter.

## Field Definition and Reference

1. **First lien / senior lien position at time of origination** - The position of the mortgage relative any additional liens on the property. The loan was originated as a first lien loan on the collateral property.
2. **State** – Report the U.S. state using the two character postal abbreviation in which the collateral property is located. Please be sure to provide the state where the collateral property is located and not the billing address of the homeowner as the two may differ for non-Owner Occupied properties and second homes. Report as 'OT' any property in the US not in one of the 50 states or the District of Columbia, such as Puerto Rico, Virgin Islands, etc. Do not report loans on properties located outside the United States. State abbreviations provided in Appendix E.
3. **Last Modified Date** – The date on which a modification agreement was effective with a borrower and the agreement was finalized. Use the date on which the loan was most recently modified if it has been modified more than once. This date is used when determining when a new modification has been completed during the reporting period, as well as the vintage needed for calculated item #14 Modification Re-defaults.
4. **Capitalization** – Report loans for which a delinquent amount, Payment, Interest, Taxes, or Insurance or fees, was capitalized and added to the outstanding principal balance as part of a loan modification during the reporting period.
5. **Rate Reduction or Freeze**- Report loans where, through loss mitigation during the reporting period, the interest rate has been reduced to be less than the scheduled value or the interest rate was frozen at a lower rate than if allowed to adjust according to original contractual terms. This would include instances where the rate reduction is not permanent such as a step modification.
6. **Term Extension** - Report loans for which the remaining term of the loan or contractual maturity date was extended through loss mitigation during the reporting period.
7. **Principal Reductions** - Report whether principal was forgiven through loss mitigation during the reporting period. Include as a principal reduction any modification with conditional principal forgiveness, even if the conditional forgiveness has not been entirely recognized. Reductions should be a material amount of the loan principal and not part of a short-term payment plan.
8. **Principal Deferral** – Report loans that had a material amount of principal deferred through loss mitigation during the reporting period. Deferrals should be a material amount of the loan principal and not part of a short-term payment plan.
9. **Modification Activity Not Reported** – Report loans for which specific modification information is not known or not available during the reporting period.
10. **Combination Modification Action** – Report loans which had more than 1 modification action through loss mitigation during the reporting period. This would include loans that had more than one of the following: capitalization, rate reduction, rate freeze, term extension, principal reduction, or principal deferral.

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- 11. **Principal & Interest Payment Pre-Modification** - The scheduled principal and interest amount in the month prior to loan modification. Do not include escrows for insurance or taxes.
- 12. **Principal & Interest Payment Post-Modification** - Report the scheduled principal and interest amount in the month following loan modification. Do not include escrows for insurance or taxes.
- 13. **Changes in Monthly Principal and Interest Payments** – the percent change between the P&I payment pre-modification and the P&I payment post-modification for a modified loan. The percent difference should be calculated:

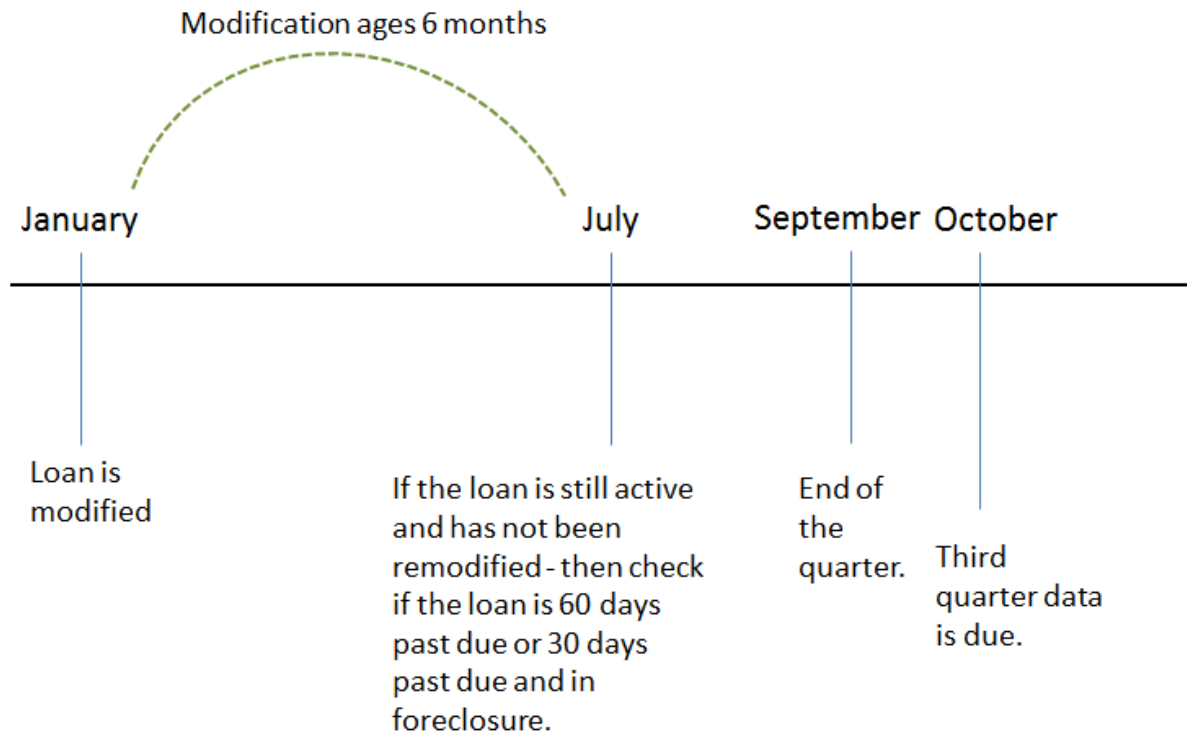
$$= \frac{(P\&I \text{ Post Modification} - P\&I \text{ Pre Modification})}{P\&I \text{ Pre Modification}}$$

The Dodd-Frank Act requires specific segmentation of these payment changes, which are described in the table below.

Changes in Monthly Payment and Interest Calculation logic		
<u>XML Field Reference</u>	<u>Changes in Monthly P&amp;I Payments by State for Modifications Implemented in the Reporting Period</u>	<u>Number of Re-defaults for Loans Modified Six Months Previously</u>
Decreased20	≥ 0.20	> 0.20
Decreased10_20	< 0.20 and ≥ 0.10	≤ 0.20 and > 0.10
Decreased10	< 0.10	≤ 0.10
Unchanged	0; P&I Pre-modification = P&I Post-modification	0; P&I Pre-modification = P&I Post-modification
Increased	< 0 ; P&I Pre-modification > P&I Post-Modification	< 0 ; P&I Pre-modification > P&I Post-Modification
NotReported	Information is missing or unknown	Information is missing or unknown



14. **Modification Re-defaults** — Report the modified loans with a Last Modified Date six months prior to any month in the reporting period that subsequently 1) became 60 days or more delinquent or 2) became 30 days or more delinquent and is a foreclosure in process. Measure should only include active loans that have been modified and have had time to age 6 months following the modification date. If a loan has been re-modified, use the Last Modified Date. Below is a figure of a modification re-default calculation for a loan modification that took place in January and reported in third quarter data.



15. **Total Servicing** – Report the total amount of unpaid principal balance in millions for all active loans at the end of the reporting period. Do not include loans that have been paid-in-full, liquidated, charged-off, or transferred servicing to another servicer as of the end of the reporting period.

16. **Prime** – Report loans for which the institution has classified the mortgage loan as underwritten according to prime loan standards in its internal credit scoring system.

17. **Alt-A** – Report loans for which the institution has classified the mortgage loan as underwritten according to Alt-A loan standards in its internal credit scoring system.

18. **Subprime** - Report loans for which the institution has classified the mortgage loan as underwritten according to subprime loan standards in its internal credit scoring system.

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19. **Other Credit Class** - Report loans for which the institution has not classified the mortgage loan under the previous definitions of Prime, Alt-A or Subprime or the credit status is unknown.
20. **Current and Performing** – Report active loans for which are current and not a foreclosure in process. Include in this category loans that are in Bankruptcy but less than 30-59 days delinquent. Use the MBA delinquency reporting<sup>2</sup> method to determine whether an active loan is current and performing.
21. **30–59 Days Delinquent** – Report active loans for which payments are between 30 and 59 days past due and not in bankruptcy or marked as a foreclosure in process. Use the MBA delinquency reporting<sup>1</sup> method to determine whether an active loan is 30-59 past due.
22. **60–89 Days Delinquent** - Report loans for which payments are 60-89 days past due and not in bankruptcy or marked as a foreclosure in process. Use the MBA delinquency reporting<sup>1</sup> method to determine whether an active loan is 60-89 days past due.
23. **90 or More Days Delinquent** - Report loans for which payments are 90 or more days past due and not in bankruptcy or marked as a foreclosure in process. Use the MBA delinquency reporting<sup>1</sup> method to determine whether an active loan is 90 or more days past due.
24. **Bankruptcy 30 or More Days Delinquent** – Report loans which are bankrupt and payment is 30 or more days past due and not a foreclosure in process. Use the MBA delinquency reporting<sup>1</sup> method to determine whether an active loan is 30 or more days past due.
25. **Foreclosures in process**—Report loans for which there are formal foreclosure proceedings but have not yet completed the foreclosure process within the reporting period. Do not include loans that have had their foreclosure procedures suspended due to loss mitigation or bankruptcy activities. Report loans with a suspended foreclosure based upon their delinquency or bankruptcy status only (numbers 25-29).
26. **Completed Foreclosures** – Report loans for which the ownership of properties transferred to servicers or investors within the reporting period.
27. **Short Sale** – Report loans for which borrowers engaged in a Short Sale where the collateral property sold at net less than the total amount due on the mortgage. Report Short Sales that have completed within the reporting period.
28. **New Deed-in-Lieu-of-Foreclosure** – Report loans for which transfer ownership of the property (deed) to the servicer in full satisfaction of the outstanding mortgage debt within the reporting period.
29. **Newly Initiated Foreclosures** – Report loans which has been referred for formal foreclosure proceedings during the reporting period. The loan should have a foreclosure referral date within the reporting period. Do not include loans that have had their foreclosure procedures suspended due to loss mitigation or bankruptcy activities.

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<sup>2</sup> Use Next Payment Due Date for calculating delinquencies based on the MBA reporting method.

## Technical Specifications

The Mortgage Metrics aggregated measurements will be collected using standardized Extensive Markup Language (XML) file format. The MMR XML Schema.xsd (Schema) as provided in Appendix A depicts the data file format for submitting the metrics. The schema provides the technical details including the XML structure and hierarchy as well as the attributes, elements, field names and value formats for submitting the data.

### Schema Definition Details

#### Rqmt

This column indicates whether an item is mandatory (M), conditionally required (C), or optional (O). The XSD enforces the mandatory fields as required.

#### Occurs

This column identifies the number of occurrences permitted for the related item. It consists of two entries separated by double dots. The pair is read as minimum occurs-to-maximum occurs.

Occurs	Min	Max	Explanation
1..1	1	1	Mandatory item, one and only one occurrence
1..n	1	n	Mandatory item, one to “n” occurrences
1..*	1	∞	Mandatory item, one to unlimited occurrences

#### Datatype

This describes the assigned XML notation or datatype along with the maximum or absolute length allowed for text or the total and fractional digits allowed for numbers. Boolean entries use the values 0=false and 1=true.

XML Datatype	Type	Explanation
xs:nonNegativeInteger	INTEGER	The related item represents numeric value with no precision (positive whole numbers).
xs:dateTime	DATETIME	The related item represents a dateTime format.
xs:string	STRING	The related item represent alpha numeric character values
xs:date	DATE	The related item represents a date format.
xs:time	TIME	The related item represents a Time format.

**Table: 0. File Reference Table**

Item	Field	Rqmt	Occurs	Data Type	Xpath	Valid Value
1	RSSDID	M	1..1	INTEGER		
2	FileVersion	M	1..1	INTEGER		00-99 []
3	QuarterEnd	M	1..1	DATE		Last Day of quarter for the reporting period. (MM-DD-YYYY)
4	ASOFDATE	M	1..1	DATE		Date for which information was finalized. (MM-DD-YYYY)
5	CreateDate	M	1..1	DATE		Date the file was generated for reporting. (MM-DD-YYYY)
6	CreateTime	M	1..1	TIME		hh:mm:ss

**Table: 1. Mortgage Modification Action by State**

Item	Field	Rqmt	Occurs	Data Type	Xpath	Valid Value
1	StateName	M	1..52	STRING	MMRData/MMRMortgageModificationActionByState@StateName	STATE_NAME (2 digit state abbreviation)
2	Capitalization	M	1..1	INTEGER	MMRData/MMRMortgageModificationActionByState@Capitalization	Positive whole number >= 0
3	RateReductionorFreeze	M	1..1	INTEGER	MMRData/MMRMortgageModificationActionByState@RateReductionorFreeze	Positive whole number >= 0
4	TermExtension	M	1..1	INTEGER	MMRData/MMRMortgageModificationActionByState@TermExtension	Positive whole number >= 0
5	PrincipalReductions	M	1..1	INTEGER	MMRData/MMRMortgageModificationActionByState@PrincipalReductions	Positive whole number >= 0
6	PrincipalDeferral	M	1..1	INTEGER	MMRData/MMRMortgageModificationActionByState@PrincipalDeferral	Positive whole number >= 0
7	Combination	M	1..1	INTEGER	MMRData/MMRMortgageModificationActionByState@Combination	Positive whole number >= 0
8	NotReported	M	1..1	INTEGER	MMRData/MMRMortgageModificationActionByState@NotReported	Positive whole number >= 0

**Table: 2. Combination Modification Action by State**

Item	Field	Rqmt	Occurs	Data Type	Xpath	Valid Value
1	StateName	M	1..52	STRING	MMRData/MMRCombinationModificationActionByState@StateName	STATE_NAME (2 digit state abbreviation)
2	Capitalization	M	1..1	INTEGER	MMRData/MMRCombinationModificationActionByState@Capitalization	Positive whole number >= 0
3	RateReductionorFreeze	M	1..1	INTEGER	MMRData/MMRCombinationModificationActionByState@RateReductionorFreeze	Positive whole number >= 0
4	TermExtension	M	1..1	INTEGER	MMRData/MMRCombinationModificationActionByState@TermExtension	Positive whole number >= 0
5	PrincipalReductions	M	1..1	INTEGER	MMRData/MMRCombinationModificationActionByState@PrincipalReductions	Positive whole number >= 0
6	PrincipalDeferral	M	1..1	INTEGER	MMRData/MMRCombinationModificationActionByState@PrincipalDeferral	Positive whole number >= 0

**Table: 3. Changes in Principal and Interest by State**

Item	Field	Rqmt	Occurs	Data Type	Xpath	Valid Value
1	StateName	M	1..52	STRING	MMRData/MMRChangesinPrincipalandInterestByState@StateName	STATE_NAME (2 digit state abbreviation)
2	Decreased20	M	1..1	INTEGER	MMRData/MMRChangesinPrincipalandInterestByState@Decreased20	Positive whole number >= 0
3	Decreased10_20	M	1..1	INTEGER	MMRData/MMRChangesinPrincipalandInterestByState@Decreased10_20	Positive whole number >= 0
4	Decreased10	M	1..1	INTEGER	MMRData/MMRChangesinPrincipalandInterestByState@Decreased10	Positive whole number >= 0
5	Unchanged	M	1..1	INTEGER	MMRData/MMRChangesinPrincipalandInterestByState@Unchanged	Positive whole number >= 0
6	Increased	M	1..1	INTEGER	MMRData/MMRChangesinPrincipalandInterestByState@Increased	Positive whole number >= 0
7	NotReported	M	1..1	INTEGER	MMRData/MMRChangesinPrincipalandInterestByState@NotReported	Positive whole number >= 0

**Table: 4. Re-defaults for Loan Modifications by State**

Item	Field	Rqmt	Occurs	Data Type	Xpath	Valid Value
1	StateName	M	1..52	STRING	MMRData/MMRRedefaultsforLoanModificationByState@StateName	STATE_NAME (2 digit state abbreviation)
2	Decreased20	M	1..1	INTEGER	MMRData/MMRRedefaultsforLoanModificationByState@Decreased20	Positive whole number >= 0
3	Decreased10_20	M	1..1	INTEGER	MMRData/MMRRedefaultsforLoanModificationByState@Decreased10_20	Positive whole number >= 0
4	Decreased10	M	1..1	INTEGER	MMRData/MMRRedefaultsforLoanModificationByState@Decreased10	Positive whole number >= 0
5	Unchanged	M	1..1	INTEGER	MMRData/MMRRedefaultsforLoanModificationByState@Unchanged	Positive whole number >= 0
6	Increased	M	1..1	INTEGER	MMRData/MMRRedefaultsforLoanModificationByState@Increased	Positive whole number >= 0
7	NotReported	M	1..1	INTEGER	MMRData/MMRRedefaultsforLoanModificationByState@NotReported	Positive whole number >= 0

**Table: 5. Overall Mortgage Portfolio**

Item	Field	Rqmt	Occurs	Data Type	Xpath	Valid Value
1	TotalServicingUnpaidPrincipalBalance	M	1..1	INTEGER	MMRData/MMROverallMortgagePortfolio@TotalServicingUnpaidPrincipalBalance	Positive whole number >= 0
2	Prime	M	1..1	INTEGER	MMRData/MMROverallMortgagePortfolio@Prime	Positive whole number >= 0
3	AltA	M	1..1	INTEGER	MMRData/MMROverallMortgagePortfolio@AltA	Positive whole number >= 0
4	SubPrime	M	1..1	INTEGER	MMRData/MMROverallMortgagePortfolio@SubPrime	Positive whole number >= 0
5	Other	M	1..1	INTEGER	MMRData/MMROverallMortgagePortfolio@Other	Positive whole number >= 0

**Table: 6. Overall Portfolio Performance**

Item	Field	Rqmt	Occurs	Data Type	Xpath	Valid Value
1	CurrentandPerforming	M	1..1	INTEGER	MMRData/MMROverallPortfolioPerformance@CurrentandPerforming	Positive whole number >= 0
2	DaysDelinquent30to59	M	1..1	INTEGER	MMRData/MMROverallPortfolioPerformance@DaysDelinquent30to59	Positive whole number >= 0

3	DaysDelinquent60to89	M	1..1	INTEGER	MMRData/MMROverallPortfolioPerformance@DaysDelinquent60to89	Positive whole number >= 0
4	DaysDelinquent90orMore	M	1..1	INTEGER	MMRData/MMROverallPortfolioPerformance@DaysDelinquent90orMore	Positive whole number >= 0
5	DaysDelinquentBankruptcy30orMore	M	1..1	INTEGER	MMRData/MMROverallPortfolioPerformance@DaysDelinquentBankruptcy30orMore	Positive whole number >= 0
6	ForeclosuresinProcess	M	1..1	INTEGER	MMRData/MMROverallPortfolioPerformance@ForeclosuresinProcess	Positive whole number >= 0

**Table: 7. Completed Foreclosures and Other Home Forfeiture Actions**

Item	Field	Rqmt	Occurs	Data Type	Xpath	Valid Value
1	CompletedForeclosures	M	1..1	INTEGER	MMRData/MMRCompletedForeclosuresandOtherHomeForfeitureActions@CompletedForeclosures	Positive whole number >= 0
2	NewShortSales	M	1..1	INTEGER	MMRData/MMRCompletedForeclosuresandOtherHomeForfeitureActions@NewShortSales	Positive whole number >= 0
3	NewDeedinLieuofForeclosureActions	M	1..1	INTEGER	MMRData/MMRCompletedForeclosuresandOtherHomeForfeitureActions@NewDeedinLieuofForeclosureActions	Positive whole number >= 0
4	NewlyInitiatedForeclosures	M	1..1	INTEGER	MMRData/MMRCompletedForeclosuresandOtherHomeForfeitureActions@NewlyInitiatedForeclosures	Positive whole number >= 0

## File Submission Requirements

<b>Description:</b>	Mortgage Metrics aggregated measurements will be provided in XML (Extensive Markup Language) based on the XML Schema format provided in Appendix C. Data files will be sent directly to the OCC using secured file transfer protocol technology.
<b>Frequency:</b>	Quarterly, end of the following month <sup>3</sup> . After the quarter end reporting period. If day is non-business day, report next business day.

## Submission Process

The Office of the Comptroller of the Currency will be collecting the Mortgage Metrics using the secure Large File Transfer tool available on OCC BankNet site. All data and information uploaded using this technology is automatically encrypted and secured before it is transmitted to the OCC.

In order to use BankNet and the Large File Transfer tool, reporters must first [register](#) for a BankNet account. To register, go to [www.banknet.gov](http://www.banknet.gov) and click on “Register” on the left side of the page. During registration, users must provide the OCC charter of the National Bank for which the Mortgage Metrics will be associated. If you have any questions regarding the registration, please contact your bank’s BankNet representative agent or call the BankNet support team by phone 1-800-641-5925 or by email [BankNet@occ.treas.gov](mailto:BankNet@occ.treas.gov).

Reporters are encouraged to install and utilize the browser based add-on wizard to maximize the transmission method capabilities when uploading data files.

Upon successful upload to the BankNet Large File Transfer tool, users will receive a confirmation email confirming the receipt of the file.

Reporting entity will be responsible for providing the OCC with the listing of names and contact information for whom should be granted secure access for uploading data files to the MMR Reporting data folder using BankNet/Large File Transfer utility.

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<sup>3</sup> March 2016 data submission due April 30th 2016 will be an optional data submission. Quarterly data submissions beginning with June 2016 and forward will be required.



## File Naming Convention

All data files must comply with the file name format specified below. By not conforming to the naming standard will result in a rejection of the data file.

MMR\_[BANK\_RSSD\_ID]\_[YYYYMM]\_[01-99]\_OCC.[File Extension]

**Definition:**

**BANK\_RSSD\_ID**: Indicates the Firm's RSSD ID.

**YYYYMM**: Report the Year (4 digits), and Month (2 digits) for the quarter end reporting period. The date is the as-of reporting period for the data, not the date the file was created or transmitted sent. (I.e. 201603, 201606, 201609, 201612)

**01-99**: Indicates the version of the data file submitted. The first submission within a given Quarter End period should indicate **01** and subsequent submissions within the Quarter End period should be incremented by 1 (i.e. second submission will contain **02**; etcetera for any additional resubmissions). Only full and complete file submissions will be accepted if multiple versions are submitted for a given Quarter End period.

**File Extension**: Indicates the file extension of the data file. Reports should use **.xml** as the default file extension or **.zip** if submitting the xml file in a compressed format.

Example:

MMR\_123456\_201603\_01\_OCC.xml

**Or**

MMR\_123456\_201603\_01\_OCC.zip

## Appendix A: Illustration of Collection Requirements

This section provides a visual representation for each of the Mortgage Metrics aggregated collection requirements set forth in the General Requirements section.

**Table 1. Illustrative reference of requirements (1A) through (1E) and (G).**

Number of Mortgage Modification Actions Implemented in the XX Quarter of XXXX							
State	Capitalization	Rate Reduction or Freeze	Term Extension	Principal Reduction	Principal Deferral	Combination	Not Reported
AL	32	1	20	0	0	603	2
AK	2	0	5	0	0	30	0
...	...	...	...	...	...	...	...

**Table 2. Illustrative reference of requirements (1F).**

Number of Mortgage Modification Actions in Combination Actions Implemented in the XX Quarter of XXXX					
State	Capitalization	Rate Reduction or Freeze	Term Extension	Principal Reduction	Principal Deferral
AL	542	466	522	18	49
AK	27	16	27	2	0
...	...	...	...	...	...

**Table 3. Illustrative reference of requirements (2A) through (2F).**

Changes in Monthly Principal and Interest Payments by State Modifications Implemented in the XX Quarter of XXXX						
State	Decreased $\geq$ 20%	Decreased $\geq$ 10% and $<$ 20%	Decreased $<$ 10%	Unchanged	Increased	Not Reported
AL	320	144	97	7	89	1
AK	18	8	8	0	3	0
...	...	...	...	...	...	...

**Table 4. Illustrative reference of requirements (3A) through (3F)**

Number of Re-Defaults for Loans Modified in the XX Quarter of XXXX (60 or More Days Delinquent after 6 Months by Changes in Monthly Principal and Interest Payments)						
State	Decreased $>$ 20%	Decreased $>$ 10% and $\leq$ 20%	Decreased $\leq$ 10%	Unchanged	Increased	Not Reported
AL	77	44	32	3	29	1
AK	4	0	1	0	1	0
...	...	...	...	...	...	...

**Table 5. Illustrative reference of requirements (4A) through (4C)**

Overall Mortgage Portfolio
----------------------------

	MM/DD/YYYY
Total Servicing (Millions)	\$4,129,719
Composition (Number of Loans in Each Risk Category of the Portfolio)	
Prime	18,387,920
Alt-A	2,482,088
Subprime	1,463,816
Other	2,170,147

**Table 6. Illustrative reference of requirements (5A)**

Overall Portfolio Performance	
Delinquency Status	MM/DD/YYYY
Current and Performing	22,805,058
30–59 Days Delinquent	504,718
60–89 Days Delinquent	180,269
90 or More Days Delinquent	391,013
Bankruptcy 30 or More Days Delinquent	190,081
Foreclosures in Process	432,832

**Table 7. Illustrative reference of requirements (6A) through (6D).**

Completed Foreclosures and Home Forfeiture Actions	
	MM/DD/YYYY
Completed Foreclosures	56,185
New Short Sales	13,613
New Deed-in-Lieu-of-Foreclosure Actions	1,880
Newly Initiated Foreclosures - Total	90,852

## Appendix B – Traceability Matrix and Cross-walk From Prior Loan Level Data Collection to the Aggregate Data Collection

This section will define the traceability between the OCC Loss Mitigation loan level data elements collected by a third party vendor through 9/30/2016 and the aggregated metrics described in this specifications to fulfill the reporting requirements set forth. Appendix B will assist in identifying the appropriate Loss Mitigation loan level data elements and associated logic to use for deriving and aggregating the end of month and quarter end metrics that will be reported to fulfill the reporting requirements for the quarterly mortgage metrics report. Table 8 depicts the Loss Mitigation loan level fields that used should be used to provide the aggregated Mortgage Metrics.

As a general note, data providers are not required to maintain the existing loan level data files past the termination date provided by their OCC examination staff. This traceability matrix and cross-walk is made available as a guide and tool for developing the new aggregate data submissions. Should data providers continue to produce the loan level data files, they can use the logic provided below to calculate the necessary aggregate measures for submission.

**Table 8. List of Loan Level Fields used to derive Aggregate Measurements**

Field Number	Field Name
2	Lien Position At Origination
10	Unpaid Principal Balance
23	Property State
26	Foreclosure status
27	Foreclosure Referral Date
28	Liquidation Status
29	Foreclosure Sale Date
30	Workout Type Completed / Executed
31	Next Payment Due Date
32	Bankruptcy Flag
40	Credit Class <sup>4</sup>
43	Modification Type
69	Principal Deferred
70	Principal Write-down
71	Capitalization
72	Interest Rate Reduced
73	Interest Rate Frozen
74	Term Extended
92	P&I Amount Before Modification
93	P&I Amount After Modification

<sup>4</sup> Original Credit Score/FICO (Field 15) from the Loan Level data collection had been used previously to determine Portfolio Composition for the Mortgage Metrics Report through the Fourth Quarter of 2015. Beginning with the First Quarter of 2016 data submission, reporters should adhere to the Field Definition and Reference section for defining the Portfolio Composition (Prime, Alt-A, Subprime, and Other) utilizing the bank's internal scoring system.

## Traceability Matrix and Logic

Data Element	Field #	Field Name	Loan Level Calculation Logic	Aggregation Level	XML Field Reference
Current Quarter				Last Day of Quarter (MM-DD-YYYY)	QuarterEnd
Current and Performing	31 2 28 10	Next Payment Due Date Lien Position at Origination Liquidation Status Unpaid Principal Balance	((Next Payment Due Date > Current Month Reported) OR MONTH(Current Month Reported)= MONTH(Next Payment Due Date) AND DAY(Next Payment Due Date) > 1)) AND Lien Position at Origination=1 AND Liquidation Status = 0 AND Unpaid Principal Balance>0	Number of Loans for last month of the quarter	CurrentandPerforming
30–59 Days Delinquent	31 26 32 2 28 10	Next Payment Due Date Foreclosure status Bankruptcy Flag Lien Position at Origination Liquidation Status Unpaid Principal Balance	(MONTH(Next Payment Due Date) - MONTH(Current Month Reported) = 1 AND DAY(Next Payment Due Date) > 1) OR MONTH(Next Payment Due Date) - MONTH(Current Month Reported) = 0 AND DAY(Next Payment Due Date) = 1) AND Foreclosure Status=0 AND Is Bankrupt = 0 AND Lien Position at Origination=1 AND Liquidation Status = 0 AND Unpaid Principal Balance>0	Number of Loans for last month of the quarter	DaysDelinquent30to59
60–89 Days Delinquent	31 26 32 2 28 10	Next Payment Due Date Foreclosure status Bankruptcy Flag Lien Position at Origination Liquidation Status Unpaid Principal Balance	(MONTH(Next Payment Due Date Month) - MONTH(Current Month Reported) = 2 AND DAY(Next Payment Due Date) > 1) OR MONTH(Next Payment Due Date) - MONTH(Current Month Reported) = 1 AND DAY(Next Payment Due Date) = 1 ) AND Foreclosure Status=0 AND Is Bankrupt = 0 AND Lien Position at Origination=1 AND Liquidation Status = 0 AND Unpaid Principal Balance>0	Number of Loans for last month of the quarter	DaysDelinquent60to89

90 or More Days Delinquent	31 26 32 2 28 10	Next Payment Due Date Foreclosure status Bankruptcy Flag Lien Position at Origination Liquidation Status Unpaid Principal Balance	(MONTH(Next Payment Due Date Month) - MONTH(Current Month Reported) ≥ 3 AND DAY(Next Payment Due Date) > 1) OR MONTH(Next Payment Due Date) - MONTH(Current Month Reported) = 2 AND DAY( Next Payment Due Date) = 1) AND Foreclosure Status=0 AND Is Bankrupt = 0 AND Lien Position at Origination=1 AND Liquidation Status = 0 AND Unpaid Principal Balance>0	Number of Loans for last month of the quarter	DaysDelinquent90orMore
Bankruptcy 30 or More Days Delinquent	31 32 2 28 10	Next Payment Due Date Bankruptcy Flag Lien Position at Origination Liquidation Status Unpaid Principal Balance	MONTH(Next Payment Due Date Month) - MONTH(Current Month Reported) ≥ 1 AND DAY(Next Payment Due Date) > 1) OR MONTH(Next Payment Due Date) - MONTH(Current Month Reported) = 0 AND DAY( Next Payment Due Date) = 1 AND Is Bankrupt = 1 AND Lien Position at Origination=1 AND Liquidation Status = 0 AND Unpaid Principal Balance>0	Number of Loans for last month of the quarter	DaysDelinquentBankruptcy30orMore
Foreclosures in Process	31 26 32 2 28 10	Next Payment Due Date Foreclosure status Bankruptcy Flag Lien Position at Origination Liquidation Status Unpaid Principal Balance	MONTH(Next Payment Due Date Month) - MONTH(Current Month Reported) ≥ 1 AND DAY(Next Payment Due Date) > 1) OR MONTH(Next Payment Due Date) - MONTH(Current Month Reported) = 0 AND DAY( Next Payment Due Date) = 1 AND Foreclosure Status= 1 AND Is Bankrupt = 0 AND Lien Position at Origination=1 AND Liquidation Status = 0 AND Unpaid Principal Balance>0	Number of Loans for last month of the quarter	ForeclosuresinProcess
Total Servicing (Millions)	2 28 10	Lien Position at Origination Liquidation Status Unpaid Principal Balance	Lien Position at Origination=1 AND Liquidation Status = 0 AND Unpaid Principal Balance>0	Number of Loans for last month of the quarter	TotalServicingUnpaidPrincipalBalance

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Total Number of Loans - Prime	40 2 28 10	Credit Class Lien Position at Origination Liquidation Status Unpaid Principal Balance	Credit Class = 'Prime' AND Lien Position at Origination=1 AND Liquidation Status = 0 AND Unpaid Principal Balance>0	Number of Loans for last month of the quarter	Prime
Total Number of Loans - Alt-A	40 2 28 10	Credit Class Lien Position at Origination Liquidation Status Unpaid Principal Balance	Credit Class = 'Alt-A' AND Lien Position at Origination=1 AND Liquidation Status = 0 AND Unpaid Principal Balance>0	Number of Loans for last month of the quarter	AltA
Total Number of Loans - SubPrime	40 2 28 10	Credit Class Lien Position at Origination Liquidation Status Unpaid Principal Balance	Credit Class = 'Subprime' AND Lien Position at Origination=1 AND Liquidation Status = 0 AND Unpaid Principal Balance>0	Number of Loans for last month of the quarter	SubPrime
Total Number of Loans - Other Credit Class	40 2 10 28	Credit Class Lien Position at Origination Liquidation Status Unpaid Principal Balance	Credit Class = 'Other Credit Class' AND Lien Position at Origination=1 AND Liquidation Status = 0 AND Unpaid Principal Balance>0	Number of Loans for last month of the quarter	Other
Completed Foreclosures	29 2 28 10	Foreclosure Sale Date Lien Position at Origination Liquidation Status Unpaid Principal Balance	YEAR(Foreclosure Sale Date) = YEAR(Current Month Reported) AND MONTH(Foreclosure Sale Date) = MONTH(Current Month Reported) AND Lien Position at Origination=1 Liquidation Status is null, 0, or 2 AND Unpaid Principal Balance > 0	Number of Loans for each month within the quarter	CompletedForeclosures
New Short Sale	30 2	Workout Type Completed / Executed Lien Position at Origination	Workout Type Completed / Executed = 4 AND Lien Position at Origination=1	Number of Loans for each month within the quarter	NewShortSales
New Deed-in-Lieu-of-Foreclosure	30 2	Workout Type Completed / Executed Lien Position at Origination	Workout Type Completed / Executed = 3 AND Lien Position at Origination=1	Number of Loans for each month within the quarter	NewDeedinLieuofForeclosureActions

Newly Initiated Foreclosures	27 2 28 10	Foreclosure Referral Date Lien Position at Origination Liquidation Status Unpaid Principal Balance	YEAR(Foreclosure Referral Date) = YEAR(Current Month Reported) AND MONTH(Foreclosure Referral Date) = MONTH(Current Month Reported) AND Lien Position at Origination=1 AND Liquidation Status = 0 AND Unpaid Principal Balance>0	Number of Loans for each month within the quarter	NewlyInitiatedForeclosures
Capitalization	30 43 69 70 71 72 73 74 2 28 10	Workout Type Modification Type Principal Deferred Principal Write-down Capitalization Interest Rate Reduced Interest Rate Frozen Term Extended Lien Position at Origination Liquidation Status Unpaid Principal Balance	Workout Type in('1','8') AND Modification Type between 1 and 12 AND Principal Deferred = N AND Principal Write-down = N AND Capitalization = Y AND Interest Rate Reduced = N AND Interest Rate Frozen = N AND Term Extended = N AND Lien Position at Origination=1 AND Liquidation Status = 0 AND Unpaid Principal Balance>0	Number of Loans for each month within the quarter	Capitalization
Rate Reduction or Freeze	30 43 69 70 71 72 73 74 2 28 10	Workout Type Modification Type Principal Deferred Principal Write-down Capitalization Interest Rate Reduced Interest Rate Frozen Term Extended Lien Position at Origination Liquidation Status Unpaid Principal Balance	Workout Type in('1','8') AND Modification Type between 1 and 12 AND Principal Deferred = N AND Principal Write-down = N AND Capitalization = N AND (Interest Rate Reduced = Y or Interest Rate Frozen = Y) AND Term Extended = N AND Lien Position at Origination=1 AND Liquidation Status = 0 AND Unpaid Principal Balance > 0	Number of Loans for each month within the quarter	RateReductionorFreeze



Term Extension	30 43 69 70 71 72 73 74 2 28 10	Workout Type Modification Type Principal Deferred Principal Write-down Capitalization Interest Rate Reduced Interest Rate Frozen Term Extended Lien Position at Origination Liquidation Status Unpaid Principal Balance	Workout Type in('1','8') AND Modification Type between 1 and 12 AND Term Extended = Y AND Capitalization = N AND Interest Rate Reduced = N AND Interest Rate Frozen = N AND Principal Deferred = N AND Principal Write-down = N AND Lien Position at Origination=1 AND Liquidation Status = 0 AND Unpaid Principal Balance>0	Number of Loans for each month within the quarter	TermExtension
Principal Reductions	30 43 69 70 71 72 73 74 2 28 10	Workout Type Modification Type Principal Deferred Principal Write-down Capitalization Interest Rate Reduced Interest Rate Frozen Term Extended Lien Position at Origination Liquidation Status Unpaid Principal Balance	Workout Type in('1','8') AND Modification Type between 1 and 12 AND Principal Write-Down = Y AND Capitalization = N AND Interest Rate Reduced = N AND Interest Rate Frozen = N AND Term Extended = N AND Principal Deferred = N AND Lien Position at Origination=1 AND Liquidation Status = 0 AND Unpaid Principal Balance>0	Number of Loans for each month within the quarter	PrincipalReductions
Principal Deferral	30 43 69 70 71 72 73 74 2 28 10	Workout Type Modification Type Principal Deferred Principal Write-down Capitalization Interest Rate Reduced Interest Rate Frozen Term Extended Lien Position at Origination Liquidation Status Unpaid Principal Balance	Workout Type in('1','8') AND Modification Type between 1 and 12 AND Principal Write-down = N AND Principal Deferred = Y AND Capitalization = N AND Interest Rate Reduced = N AND Interest Rate Frozen = N AND Term Extended = N AND Lien Position at Origination=1 AND Liquidation Status = 0 AND Unpaid Principal Balance>0	Number of Loans for each month within the quarter	PrincipalDeferral

	43 69 70 71 72 73 74 2 28 10	Modification Type Principal Deferred Principal Write-down Capitalization Interest Rate Reduced Interest Rate Frozen Term Extended Lien Position at Origination LIQUIDATION STATUS Unpaid Principal Balance	Workout Type in('1','8') AND Modification Type between 1 and 12 AND Lien Position at Origination=1 AND LIQUIDATION STATUS = 0 AND Unpaid Principal Balance>0 WHERE Number of modification actions (Principal Write-down = Y OR Capitalization = Y OR Interest Rate Reduced = Y OR Interest Rate Frozen = Y OR Term Extended = Y OR Principal Deferred = Y) >1	Number of Loans for each month within the quarter	Combination
Total Combinations					
	30 43 69 70 71 72 73 74 2 28 10	Workout Type Modification Type Principal Deferred Principal Write-down Capitalization Interest Rate Reduced Interest Rate Frozen Term Extended Lien Position at Origination Liquidation Status Unpaid Principal Balance	Workout Type in('1','8') AND Modification Type between 1 and 12 AND Lien Position at Origination=1 AND Liquidation Status= 0 AND Unpaid Principal Balance>0 AND Capitalization = Y AND (Interest Rate Reduced = Y OR Interest Rate Frozen = Y OR Term Extended = Y OR Principal Deferred = Y OR Principal Write- down = Y )	Number of Loans for each month within the quarter	Capitalization
Combination - Cap					
	30 43 69 70 71 72 73 74 2 28 10	Workout Type Modification Type Principal Deferred Principal Write-down Capitalization Interest Rate Reduced Interest Rate Frozen Term Extended Lien Position at Origination Liquidation Status Unpaid Principal Balance	Workout Type in('1','8') AND Modification Type between 1 and 12 AND Lien Position at Origination=1 AND Liquidation Status = 0 AND Unpaid Principal Balance>0 AND (Interest Rate Reduced = Y OR Interest Rate Frozen = Y) AND (Capitalization = Y OR Term Extended = Y OR Principal Deferred = Y OR Principal Write-down = Y )	Number of Loans for each month within the quarter	RateReductionorFreeze
Combination - Rate Red or Freeze					

<p>Combination - Term Ext</p>	<p>30 43 69 70 71 72 73 74 2 28 10</p>	<p>Workout Type Modification Type Principal Deferred Principal Write-down Capitalization Interest Rate Reduced Interest Rate Frozen Term Extended Lien Position at Origination Liquidation Status Unpaid Principal Balance</p>	<p>Workout Type in('1','8') AND Modification Type between 1 and 12 AND Lien Position at Origination=1 AND Liquidation Status = 0 AND Unpaid Principal Balance&gt;0 AND Term Extended = Y AND (Capitalization = Y OR Interest Rate Reduced = Y OR Interest Rate Frozen = Y OR Principal Deferred = Y OR Principal Write-down = Y )</p>	<p>Number of Loans for each month within the quarter</p>	<p>TermExtension</p>
<p>Combination - Principal Deferral</p>	<p>30 43 69 70 71 72 73 74 2 28 10</p>	<p>Workout Type Modification Type Principal Deferred Principal Write-down Capitalization Interest Rate Reduced Interest Rate Frozen Term Extended Lien Position at Origination Liquidation Status Unpaid Principal Balance</p>	<p>Workout Type in('1','8') AND Modification Type between 1 and 12 AND Principal Deferred = Y AND (Principal Write-down = Y OR Capitalization = Y OR Interest Rate Reduced = Y OR Interest Rate Frozen = Y OR Term Extended = Y) AND Lien Position at Origination=1 AND Liquidation Status = 0 AND Unpaid Principal Balance&gt;0</p>	<p>Number of Loans for each month within the quarter</p>	<p>PrincipalReductions</p>
<p>Combination - Principal Reduction</p>	<p>30 43 69 70 71 72 73 74 2 28 10</p>	<p>Workout Type Modification Type Principal Deferred Principal Write-down Capitalization Interest Rate Reduced Interest Rate Frozen Term Extended Lien Position at Origination Liquidation Status Unpaid Principal Balance</p>	<p>Workout Type in('1','8') AND Modification Type between 1 and 12 AND Principal Write-down = Y AND (Principal Deferred = Y OR Capitalization = Y OR Interest Rate Reduced = Y OR Interest Rate Frozen = Y OR Term Extended = Y) AND Lien Position at Origination=1 AND Liquidation Status = 0 AND Unpaid Principal Balance&gt;0</p>	<p>Number of Loans for each month within the quarter</p>	<p>PrincipalDeferral</p>

Modification Activity Not Reported	30 43 69 70 71 72 73 74 2 28 10	Workout Type Modification Type Principal Deferred Principal Write-down Capitalization Interest Rate Reduced Interest Rate Frozen Term Extended Lien Position at Origination Liquidation Status Unpaid Principal Balance	Workout Type in('1','8') AND Modification Type between 1 and 12 AND Principal Write-down = N AND Capitalization = N AND Interest Rate Reduced = N AND Interest Rate Frozen = N AND Term Extended = N AND Principal Deferred = N AND Lien Position at Origination=1 AND Liquidation Status = 0 AND Unpaid Principal Balance>0	Number of Loans for each month within the quarter	NotReported
Modifications: Principal & Interest Decreased ≥ 20%	92 93 30 43 2 28 10	P&I Amount Before Modification P&I Amount After Modification Workout Type Modification Type Lien Position at Origination Liquidation Status Unpaid Principal Balance	(P&I Amount Before Modification - P&I Amount After Modification)/PI Amount Before Modification ≥ .2 (i.e. 20%) AND Workout Type in('1','8') AND Modification Type between 1 and 12 AND Lien Position at Origination=1 AND Liquidation Status = 0 AND Unpaid Principal Balance>0	Number of Loans for each month within the quarter	Decreased20
Modifications: Principal & Interest Decreased ≥10% and < 20%	92 93 30 43 2 28 10	P&I Amount Before Modification P&I Amount After Modification Workout Type Modification Type Lien Position at Origination Liquidation Status Unpaid Principal Balance	(P&I Amount Before Modification - P&I Amount After Modification)/PI Amount Before Modification ≥ .1 (i.e. 10%) AND (P&I Amount Before Modification - P&I Amount After Modification)/PI Amount Before Modification <.2 (i.e. 20%) AND Workout Type in('1','8') AND Modification Type between 1 and 12 AND Lien Position at Origination=1 AND Liquidation Status = 0 AND Unpaid Principal Balance>0	Number of Loans for each month within the quarter	Decreased10_20

Modifications: Principal & Interest Decreased < 10%	92 93 30 43 2 28 10	P&I Amount Before Modification P&I Amount After Modification Workout Type Modification Type Lien Position at Origination Liquidation Status Unpaid Principal Balance	(P&I Amount Before Modification - P&I Amount After Modification)/PI Amount Before Modification < .1 (i.e. 10%) AND (P&I Amount Before Modification - P&I Amount After Modification)/PI Amount Before Modification > 0 AND Workout Type in('1','8') AND Modification Type between 1 and 12 AND Lien Position at Origination=1 AND Liquidation Status = 0 AND Unpaid Principal Balance>0	Number of Loans for each month within the quarter	Decreased10
Modifications: Principal & Interest Unchanged	92 93 30 43 2 28 10	P&I Amount Before Modification P&I Amount After Modification Workout Type Modification Type Lien Position at Origination Liquidation Status Unpaid Principal Balance	P&I Amount Before Modification = P&I Amount After Modification AND Workout Type in('1','8') AND Modification Type between 1 and 12 AND Lien Position at Origination=1 AND Liquidation Status = 0 AND Unpaid Principal Balance>0	Number of Loans for each month within the quarter	Unchanged
Modifications: Principal & Interest Increased	92 93 30 43 2 28 10	P&I Amount Before Modification P&I Amount After Modification Workout Type Modification Type Lien Position at Origination Liquidation Status Unpaid Principal Balance	P&I Amount Before Modification < P&I Amount After Modification AND Workout Type in('1','8') AND Modification Type between 1 and 12 AND Lien Position at Origination=1 AND Liquidation Status = 0 AND Unpaid Principal Balance>0	Number of Loans for each month within the quarter	Increased

			(P&I Amount Before Modification ≤ 10 OR P&I Amount Before Modification is null OR P&I Amount After Modification ≤ 10 OR P&I Amount After Modification is null OR P&I Amount After Modification/P&I Amount Before Modification > 50 OR P&I Amount Before Modification/P&I Amount After Modification > 50)		NotReported
	92	P&I Amount Before Modification			
	93	P&I Amount After Modification			
	30	Workout Type	AND Workout Type in('1','8')		
	43	Modification Type	AND Modification Type between 1 and 12		
Modifications:	2	Lien Position at Origination	AND Lien Position at Origination=1		
Principal & Interest	28	Liquidation Status	AND Liquidation Status = 0	Number of Loans for each month within the quarter	
Not Reported	10	Unpaid Principal Balance	AND Unpaid Principal Balance>0		

<p>Re-default<sup>5</sup> Decreased &gt; 20%</p>	<p>92 93 31 26 2 28 10 30 43</p>	<p>P&amp;I Amount Before Modification P&amp;I Amount After Modification Next Payment Due Date Foreclosure status Lien Position at Origination Liquidation Status Unpaid Principal Balance Workout Type Modification Type</p>	<p><b>For loans that have aged 6 months* with the following criteria:</b></p> <p><b>1) Active loans that have become 60 Days or more delinquent during any month in the reporting period and are not in foreclosure.</b></p> <p>((MONTH(Next Payment Due Date) - MONTH(Current Month Reported) ≥ 2 AND DAY(Next Payment Due Date) &gt; 1) or MONTH(Next Payment Due Date) - MONTH(Current Month Reported) = 1 AND DAY( Next Payment Due Date) = 1 ) AND Foreclosure Status=0)</p> <p><b>OR</b></p> <p><b>2) Active loans that have become 30 Days or more delinquent and that have entered foreclosure in process during any month in the reporting period.</b></p> <p>((MONTH(Next Payment Due Date) - MONTH(Current Month Reported) ≥ 1 AND DAY(Next Payment Due Date) &gt; 1)</p> <p>or MONTH(Next Payment Due Date) - MONTH(Current Month Reported) = 0 AND DAY( Next Payment Due Date) = 1 ) AND Foreclosure Status=1))</p> <p><b>AND</b> Lien Position at Origination=1</p> <p><b>AND</b> Liquidation Status = 0</p> <p><b>AND</b> Unpaid Principal Balance&gt;0</p>	<p>Number of Loans for each month within the quarter</p>	<p>Decreased20</p>
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<sup>5</sup> Refer to the Modification Re-defaults definition in the Field Definition and Reference section for more details on loans included in this calculation.

			<p><b>WHERE</b> (P&amp;I Amount Before Modification - P&amp;I Amount After Modification)/PI Amount Before Modification &gt; .2 (i.e. 20%)</p> <p><b>* 6 month aging of the loan is identified as an active loan including the following criteria:</b></p> <ul style="list-style-type: none"><li><b>a.</b> The period in which the loan was modified and aged 6 months since modification during any month within the reported quarter; and</li><li><b>b.</b> Workout Type in("1","8"); and</li><li><b>c.</b> Modification Type between 1 and 12; and</li><li><b>d.</b> Lien Position at Origination=1; and</li><li><b>e.</b> Liquidation Status = 0; and</li><li><b>f.</b> Unpaid Principal Balance&gt;0</li></ul>		
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<p>Re-default Decreased &gt;10% and ≤ 20%</p>	<p>92 93 31 26 2 28 10 30 43</p>	<p>P&amp;I Amount Before Modification P&amp;I Amount After Modification Next Payment Due Date Foreclosure status Lien Position at Origination Liquidation Status Unpaid Principal Balance Workout Type Modification Type</p>	<p><b>For loans that have aged 6 months* with the following criteria:</b></p> <p><b>1) Active loans that have become 60 Days or more delinquent during any month in the reporting period and are not in foreclosure.</b></p> <p>((MONTH(Next Payment Due Date) - MONTH(Current Month Reported) ≥ 2 AND DAY(Next Payment Due Date) &gt; 1) or MONTH(Next Payment Due Date) - MONTH(Current Month Reported) = 1 AND DAY( Next Payment Due Date) = 1 ) AND Foreclosure Status=0)</p> <p><b>OR</b></p> <p><b>2) Active loans that have become 30 Days or more delinquent and that have entered foreclosure in process during any month in the reporting period.</b></p> <p>((MONTH(Next Payment Due Date) - MONTH(Current Month Reported) ≥ 1 AND DAY(Next Payment Due Date) &gt; 1)</p> <p>or MONTH(Next Payment Due Date) - MONTH(Current Month Reported) = 0 AND DAY( Next Payment Due Date) = 1 ) AND Foreclosure Status=1))</p> <p><b>AND</b> Lien Position at Origination=1</p> <p><b>AND</b> Liquidation Status = 0</p> <p><b>AND</b> Unpaid Principal Balance&gt;0</p> <p><b>WHERE</b> (P&amp;I Amount Before Modification - P&amp;I Amount After Modification)/PI Amount Before Modification &gt; .1 (i.e. 10%) AND (P&amp;I Amount Before Modification - P&amp;I Amount After Modification)/PI Amount Before Modification ≤ .2 (i.e. 20%)</p>	<p>Number of Loans for each month within the quarter</p>	<p>Decreased10_20</p>
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			<p><b>* 6 month aging of the loan is identified as an active loan including the following criteria:</b></p> <ul style="list-style-type: none"><li><b>a.</b> <i>The period in which the loan was modified and aged 6 months since modification during any month within the reported quarter; and</i></li><li><b>b.</b> <i>Workout Type in("1","8"); and</i></li><li><b>c.</b> <i>Modification Type between 1 and 12; and</i></li><li><b>d.</b> <i>Lien Position at Origination=1; and</i></li><li><b>e.</b> <i>Liquidation Status = 0; and</i></li><li><b>f.</b> <i>Unpaid Principal Balance&gt;0</i></li></ul>		
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<p>Re-Default Decreased ≤ 10%</p>	<p>92 93 31 26 2 28 10 30 43</p>	<p>P&amp;I Amount Before Modification P&amp;I Amount After Modification Next Payment Due Date Foreclosure status Lien Position at Origination Liquidation Status Unpaid Principal Balance Workout Type Modification Type</p>	<p><b>For loans that have aged 6 months* with the following criteria:</b></p> <p><b>1) Active loans that have become 60 Days or more delinquent during any month in the reporting period and are not in foreclosure.</b></p> <p>((MONTH(Next Payment Due Date) - MONTH(Current Month Reported) ≥ 2 AND DAY(Next Payment Due Date) &gt; 1) or MONTH(Next Payment Due Date) - MONTH(Current Month Reported) = 1 AND DAY( Next Payment Due Date) = 1 ) AND Foreclosure Status=0)</p> <p><b>OR</b></p> <p><b>2) Active loans that have become 30 Days or more delinquent and that have entered foreclosure in process during any month in the reporting period.</b></p> <p>((MONTH(Next Payment Due Date) - MONTH(Current Month Reported) ≥ 1 AND DAY(Next Payment Due Date) &gt; 1)</p> <p>or MONTH(Next Payment Due Date) - MONTH(Current Month Reported) = 0 AND DAY( Next Payment Due Date) = 1 ) AND Foreclosure Status=1))</p> <p><b>AND</b> Lien Position at Origination=1</p> <p><b>AND</b> Liquidation Status = 0</p> <p><b>AND</b> Unpaid Principal Balance&gt;0</p> <p><b>WHERE</b> (P&amp;I Amount Before Modification - P&amp;I Amount After Modification)/PI Amount Before Modification ≤ .1 (i.e. 10%) AND (P&amp;I Amount Before Modification - P&amp;I Amount After Modification)/PI Amount Before Modification &gt; 0</p>	<p>Number of Loans for each month within the quarter</p>	<p>Decreased10</p>
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			<p><b>* 6 month aging of the loan is identified as an active loan including the following criteria:</b></p> <ul style="list-style-type: none"><li><b>a.</b> <i>The period in which the loan was modified and aged 6 months since modification during any month within the reported quarter; and</i></li><li><b>b.</b> <i>Workout Type in("1","8"); and</i></li><li><b>c.</b> <i>Modification Type between 1 and 12; and</i></li><li><b>d.</b> <i>Lien Position at Origination=1; and</i></li><li><b>e.</b> <i>Liquidation Status = 0; and</i></li><li><b>f.</b> <i>Unpaid Principal Balance&gt;0</i></li></ul>		
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<p>Re-Default Unchanged</p>	<p>92 93 31 26 2 28 10 30 43</p>	<p>P&amp;I Amount Before Modification P&amp;I Amount After Modification Next Payment Due Date Foreclosure status Lien Position at Origination Liquidation Status Unpaid Principal Balance Workout Type Modification Type</p>	<p><b>For loans that have aged 6 months* with the following criteria:</b></p> <p><b>1) Active loans that have become 60 Days or more delinquent during any month in the reporting period and are not in foreclosure.</b></p> <p>((MONTH(Next Payment Due Date) - MONTH(Current Month Reported) &gt;= 2 AND DAY(Next Payment Due Date) &gt; 1) or MONTH(Next Payment Due Date) - MONTH(Current Month Reported) = 1 AND DAY( Next Payment Due Date) = 1 ) AND Foreclosure Status=0)</p> <p><b>OR</b></p> <p><b>2) Active loans that have become 30 Days or more delinquent and that have entered foreclosure in process during any month in the reporting period.</b></p> <p>((MONTH(Next Payment Due Date) - MONTH(Current Month Reported) &gt;= 1 AND DAY(Next Payment Due Date) &gt; 1)</p> <p>or MONTH(Next Payment Due Date) - MONTH(Current Month Reported) = 0 AND DAY( Next Payment Due Date) = 1 ) AND Foreclosure Status=1))</p> <p><b>AND</b> Lien Position at Origination=1</p> <p><b>AND</b> Liquidation Status = 0</p> <p><b>AND</b> Unpaid Principal Balance&gt;0</p> <p><b>WHERE</b> P&amp;I Amount Before Modification = P&amp;I Amount After Modification</p>	<p>Number of Loans for each month within the quarter</p>	<p>Unchanged</p>
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			<p><b>* 6 month aging of the loan is identified as an active loan including the following criteria:</b></p> <ul style="list-style-type: none"><li><b>a.</b> <i>The period in which the loan was modified and aged 6 months since modification during any month within the reported quarter; and</i></li><li><b>b.</b> <i>Workout Type in("1","8"); and</i></li><li><b>c.</b> <i>Modification Type between 1 and 12; and</i></li><li><b>d.</b> <i>Lien Position at Origination=1; and</i></li><li><b>e.</b> <i>Liquidation Status = 0; and</i></li><li><b>f.</b> <i>Unpaid Principal Balance&gt;0</i></li></ul>		
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<p>Re-Default Increased</p>	<p>92 93 31 26 2 28 10 30 43</p>	<p>P&amp;I Amount Before Modification P&amp;I Amount After Modification Next Payment Due Date Foreclosure status Lien Position at Origination Liquidation Status Unpaid Principal Balance Workout Type Modification Type</p>	<p><b>For loans that have aged 6 months* with the following criteria:</b></p> <p><b>1) Active loans that have become 60 Days or more delinquent during any month in the reporting period and are not in foreclosure.</b></p> <p>((MONTH(Next Payment Due Date) - MONTH(Current Month Reported) &gt;= 2 AND DAY(Next Payment Due Date) &gt; 1) or MONTH(Next Payment Due Date) - MONTH(Current Month Reported) = 1 AND DAY( Next Payment Due Date) = 1 ) AND Foreclosure Status=0)</p> <p><b>OR</b></p> <p><b>2) Active loans that have become 30 Days or more delinquent and that have entered foreclosure in process during any month in the reporting period.</b></p> <p>((MONTH(Next Payment Due Date) - MONTH(Current Month Reported) &gt;= 1 AND DAY(Next Payment Due Date) &gt; 1)</p> <p>or MONTH(Next Payment Due Date) - MONTH(Current Month Reported) = 0 AND DAY( Next Payment Due Date) = 1 ) AND Foreclosure Status=1))</p> <p><b>AND</b> Lien Position at Origination=1</p> <p><b>AND</b> Liquidation Status = 0</p> <p><b>AND</b> Unpaid Principal Balance&gt;0</p> <p><b>WHERE</b> P&amp;I Amount Before Modification &lt; P&amp;I Amount After Modification</p>	<p>Number of Loans for each month within the quarter</p>	<p>Increased</p>
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			<p><b>* 6 month aging of the loan is identified as an active loan including the following criteria:</b></p> <ul style="list-style-type: none"><li><b>a.</b> <i>The period in which the loan was modified and aged 6 months since modification during any month within the reported quarter; and</i></li><li><b>b.</b> <i>Workout Type in("1","8"); and</i></li><li><b>c.</b> <i>Modification Type between 1 and 12; and</i></li><li><b>d.</b> <i>Lien Position at Origination=1; and</i></li><li><b>e.</b> <i>Liquidation Status = 0; and</i></li><li><b>f.</b> <i>Unpaid Principal Balance&gt;0</i></li></ul>		
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<p>Re-Default Not Reported</p>	<p>92 93 31 26 2 28 10 30 43</p>	<p>P&amp;I Amount Before Modification P&amp;I Amount After Modification Next Payment Due Date Foreclosure status Lien Position at Origination Liquidation Status Unpaid Principal Balance Workout Type Modification Type</p>	<p><b>For loans that have aged 6 months* with the following criteria:</b></p> <p><b>1) Active loans that have become 60 Days or more delinquent during any month in the reporting period and are not in foreclosure.</b></p> <p>((MONTH(Next Payment Due Date) - MONTH(Current Month Reported) &gt;= 2 AND DAY(Next Payment Due Date) &gt; 1) or MONTH(Next Payment Due Date) - MONTH(Current Month Reported) = 1 AND DAY( Next Payment Due Date) = 1 ) AND Foreclosure Status=0)</p> <p><b>OR</b></p> <p><b>2) Active loans that have become 30 Days or more delinquent and that have entered foreclosure in process during any month in the reporting period.</b></p> <p>((MONTH(Next Payment Due Date) - MONTH(Current Month Reported) &gt;= 1 AND DAY(Next Payment Due Date) &gt; 1)</p> <p>or MONTH(Next Payment Due Date) - MONTH(Current Month Reported) = 0 AND DAY( Next Payment Due Date) = 1 ) AND Foreclosure Status=1))</p> <p><b>AND</b> Lien Position at Origination=1</p> <p><b>AND</b> Liquidation Status = 0</p> <p><b>AND</b> Unpaid Principal Balance&gt;0</p> <p><b>WHERE</b> (P&amp;I Amount Before Modification &lt;= 10 OR P&amp;I Amount Before Modification is null OR P&amp;I Amount After Modification &lt;= 10 OR P&amp;I Amount After Modification is null OR P&amp;I Amount After Modification/P&amp;I Amount Before Modification</p>	<p>Number of Loans for each month within the quarter</p>	<p>NotReported</p>
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			<p>&gt; 50 OR P&amp;I Amount Before Modification/P&amp;I Amount After Modification &gt; 50)</p> <p><b>* 6 month aging of the loan is identified as an active loan including the following criteria:</b></p> <ul style="list-style-type: none"> <li>a. The period in which the loan was modified and aged 6 months since modification during any month within the reported quarter; and</li> <li>b. Workout Type in("1","8"); and</li> <li>c. Modification Type between 1 and 12; and</li> <li>d. Lien Position at Origination=1; and</li> <li>e. Liquidation Status = 0; and</li> <li>f. Unpaid Principal Balance&gt;0</li> </ul>		
Property State	23	Property State	2 digit State Abbreviation, DC, Other. Report 'OT' any property in the US territory not in one of the 50 states or the District of Columbia, such as Puerto Rico, Virgin Islands.	1-4	StateName

## **Appendix C – XML Schema**

## **Appendix D – Sample XML Data File**

## Appendix E – State Abbreviation Reference

State	Abbreviation
Alabama	AL
Alaska	AK
Arizona	AZ
Arkansas	AR
California	CA
Colorado	CO
Connecticut	CT
Delaware	DE
District of Columbia	DC
Florida	FL
Georgia	GA
Hawaii	HI
Idaho	ID
Illinois	IL
Indiana	IN
Iowa	IA
Kansas	KS
Kentucky	KY
Louisiana	LA
Maine	ME
Montana	MT
Nebraska	NE
Nevada	NV
New Hampshire	NH
New Jersey	NJ
New Mexico	NM
New York	NY
North Carolina	NC
North Dakota	ND
Ohio	OH
Oklahoma	OK
Oregon	OR

**Privileged and Confidential**

Maryland	MD
Massachusetts	MA
Michigan	MI
Minnesota	MN
Mississippi	MS
Missouri	MO
Pennsylvania	PA
Rhode Island	RI
South Carolina	SC
South Dakota	SD
Tennessee	TN
Texas	TX
Utah	UT
Vermont	VT
Virginia	VA
Washington	WA
West Virginia	WV
Wisconsin	WI
Wyoming	WY
All Other US Territories (Virgin Islands, Marshall Islands, Guam, Etc.)	OT